Matteo Sirani

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Graduate study

I have been enrolled in the PhD program with an integrated MSc in Economic Research at the Bonn Graduate School of Economics since October 2024 and have completed my coursework.

My core training includes Microeconomics I (Andreas Kleiner) and Mathematics for Economists (Hendrik Hakenes), covering choice under uncertainty, general equilibrium, strategic and extensive-form games, repeated games, and incomplete information, alongside real analysis, metric spaces, correspondences, fixed-point theorems, and linear algebra.

Macroeconomics I (Keith Kuester) and Macroeconomics II (Christian Bayer and Benjamin Born) covered growth, business cycles, monetary and fiscal stabilization, consumption and saving, firm investment, and financial frictions. The sequence introduced heterogeneous-agent and incomplete-markets models, as well as structural vector autoregressions and local projections for identifying macroeconomic shocks and evaluating policy counterfactuals.

Econometrics I (Joachim Freyberger) and Econometrics II (Christoph Breunig) covered probability and statistical inference, regression theory, instrumental variables, time-series and panel-data methods, difference-in-differences, discrete-choice models, extremum estimation, and regression discontinuity designs.

In Dynamic Macroeconomics (Adam Hal Spencer) and Dynamic Methods and Applications (Sven Rady), I studied recursive and numerical methods for solving dynamic models, deterministic and stochastic dynamic programming, and continuous-time optimization. Applications included household saving under idiosyncratic and aggregate uncertainty, asset pricing, portfolio choice, and real options.

Advanced coursework complemented this methodological training. Topics in Macroeconomics: Portfolios in Macroeconomics (Thomas Hintermaier) examined household portfolios, housing and mortgages, and life-cycle incomplete-markets models. Topics in Financial Economics (Farzad Saidi) covered banking and financial intermediation, monetary policy transmission, and connections between finance and industrial organization, with an emphasis on empirical research designs. Topics in Empirical Labor Economics: The Role of Firms in the Labor Market (Amelie Schiprowski) covered causal identification, wage setting, monopsony, human capital accumulation, and hiring and promotion decisions.

Before joining Bonn, I completed an MPhil in Economics at the University of Oxford (2021–2023, Distinction) and a BSc in Economics and Finance at Bocconi University (2018–2021, 110 cum laude).

Research interests

I study how firms' financial and informational interdependence shapes aggregate fluctuations and the allocation of resources. My research asks how decisions made by individual firms affect other firms and the wider economy, with particular attention to financial frictions, market power, and expectation formation. I combine microeconomic data with quantitative models to understand these spillovers and their macroeconomic consequences.

Working paper

Financial Frictions Across the Production Network and the Transmission of Monetary Policy
With Alessandro De Sanctis, Stefan Gebauer, and Federic Holm-Hadulla. ECB Working Paper No. 3271 (2026). Currently under review.

This paper examines how sector-specific financial frictions and production network linkages shape monetary policy transmission. Using euro-area country-sector data and panel local projections, we study how financial frictions among suppliers and customers affect output and prices beyond a sector's own financial position. A multisector model with heterogeneous financial frictions rationalizes these findings, distinguishing a downstream demand channel from an upstream cost channel.

Research in progress

Algorithmic Synchrony, AI Forecasting, and Aggregate Fluctuations

This project examines how firms' use of AI forecasting tools affects expectations and aggregate fluctuations. I am developing a theoretical model and analyzing firm survey data on AI adoption and forecasting performance. I also plan to conduct a survey experiment.

Project on Market Power in Trade Credit Relationships

We study how firms' market power shapes their use of trade credit and the implications for firm growth. The project combines balance-sheet analysis with theoretical models of payment terms. We are also using invoice data to map buyer–supplier relationships and design tests that distinguish between mechanisms.

Dissertation

My current supervisors are Christian Bayer and Benjamin Born.